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## Claims

1. A method of communicating a flow of data packets across a network,

said network comprising routing means including communication nodes and communication endpoints, wherein a data packet is structured to have a plurality of fields including header fields and payload fields and such a data packet is communicated from endpoint to endpoint via 10 at least one node;

the method comprising the steps of

generating (S31) a flow identity number for said flow by an originating endpoint of said flow;

writing (S32), by said originating endpoint, at 15 least a source address of said flow and a destination address of said flow into header fields of each of data packets belonging to said flow;

writing (\$32) said flow identity number into a header field of each data packet belonging to said flow 20 which is examined by every routing means along the communication path of said flow, but remains unchanged during the whole communication; and

examining (S33) the header fields containing said flow identity number, said source address and said 25 destination address by every (\$36) routing means along the communication path of said flow, wherein

said flow is uniquely identified by the flow identity number being unique itself, or by combination of said source address and said flow identity number, or by 30 combination of said source address and said destination address and said flow identity number.

- 2. A method according to claim 1, further comprising the steps of
- recognizing (534) by said routing means that data 35

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packets belong together by identifying a flow thereof by means of the flow identity number itself, or by combination of said source address and said flow identity number, or by combination of said source address and said destination address and said flow identity number; and processing (S35) said flow by said routing means.

- 3. A method according to claim 1 or 2, wherein the communication is done via the Internet Protocol according to version 6 thereof, so that the data packets are structured according to the document "Request for Comments 2460" of the "Internet Engineering Task Force".
- A method according to claim 3, wherein said header
   field containing said flow identity number is a flow identity option field in the Hop-By-Hop Options header.
- 5. A method according to claim 4, wherein said flow of data packets corresponds to a Voice over Internet
  20 Protocol call.
  - 6. A method according to claim 1, wherein the flow identity number is generated as a concatenation of the source address and a sequence number.